

**Request to Archive  
With The National Centers for Environmental Information  
For US Voluntary Observing Ship (VOS) - International Maritime Meteorological Tape 4  
(IMMT-4) from Turbowin E-Logbook Software  
Provided by US VOS/PMOs**

**2013-02-11**

This information will be used by NCEI to conduct an appraisal and make a decision on the request.

**1. Who is the primary point of contact for this request?**

Eric Freeman  
NCDC/GCAD/IAB  
Marine Observation Analyst  
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**2. Name the organization or group responsible for creating the dataset.**

US Voluntary Observing Ships (VOS)

**3. Provide an overview summarizing the scope of data you want to archive. Describe the outputs, data variables, including their measurement resolution and coverage.**

The US Voluntary Observing Ships (VOS) report surface marine observations in both real-time (FM-13 ship format) and delayed-mode (International Maritime Meteorological Tape - IMMT format). To do this, most operating vessels use e-logbook software that allows an observer to enter information, then the software can transmit a real-time report as well as save the same report in a different format to the ship's hard drive for later access. Once in port, all reports stored on the hard drive are retrieved and sent to the National Climatic Data Center for archiving and processing. Currently, the US VOS is using Turbowin 5.0 for its e-logbook software while it transitions from paper to the newly developed SEASv9 with IMMT capabilities.

**4. What is the time period covered by the dataset? (YYYY-MM-DD, YYYY-MM or YYYY)**

From 2013-01-25  
Ongoing as continuous updates to the data record

**5. Edition or version number(s) of the dataset:**

Turbowin 5.0 is the software; Data format to be archived is International Maritime Meteorological Tape 4 (IMMT-4)

**6. Describe the level to which the data are processed. For example, are these unprocessed raw observations, derived parameters, quality controlled or inter-calibrated data, etc.?**

The data are automatically generated in IMMT-4 format and quality controlled on the fly as they are recorded by the Turbowin software on board a vessel.

**7. Approximate date when the dataset was or will be released to the public:**

2013-01-25

**8. Who are the expected users of the archived data? How will the archived data be used?**

ICOADS; SST researchers and product producers; ocean climatologists; global temperature researchers

**9. Has the dataset undergone user evaluation and/or an independent review process? Did NCEI participate in design reviews?**

No

**10. Describe the dataset's relationship to other archived datasets, such as earlier versions or related source data. If this is a new version, how does it improve upon the previous version(s)?**

These data will contribute to and are in the same format as those archived in DSI 9970

**11. List the input datasets and ancillary information used to produce the data.**

Here is the link to Turbowin (which includes software specifications, software history and contributors):

<http://www.knmi.nl/turbowin/>

The data is output in the internationally recognized IMMT-4 archive format used by the Global Collecting Centres (GCCs) for WMO delayed-mode quarterly data exchanges:

[http://www.metoffice.gov.uk/weather/marine/observations/gathering\\_data/immt-4a.pdf](http://www.metoffice.gov.uk/weather/marine/observations/gathering_data/immt-4a.pdf)

**12. List web pages and other links that provide information on the data.**

The reports are not CF compliant and have minimal, if any metadata included in the reports. The call signs in the reports can be traced back to WMO Publication No. 47 which provides ship metadata (ship and instrument) for active VOS ships:

<http://www.wmo.int/pages/prog/www/ois/pub47/pub47-home.htm>

**13. List the kinds of documents, metadata and code that are available for archiving. For example, data format specifications, user guides, algorithm documentation, metadata compliant with a standard such as ISO 19115, source code, platform/instrument metadata, data/process flow diagrams, etc.**

**1. Data Format (IMMT-4) documentation:**

[http://www.metoffice.gov.uk/weather/marine/observations/gathering\\_data/immt-4a.pdf](http://www.metoffice.gov.uk/weather/marine/observations/gathering_data/immt-4a.pdf)

Quality Control documentation(MQCS-6):

[http://www.metoffice.gov.uk/weather/marine/observations/gathering\\_data/mqcs-6a.pdf](http://www.metoffice.gov.uk/weather/marine/observations/gathering_data/mqcs-6a.pdf)

Turbowin 5.0 website with software specifications and history information: <http://www.knmi.nl/turbowin/>

**14. Indicate the data file format(s).**

**1. ASCII**

**15. Are the data files compressed?**

No

**16. Provide details on how the files are named and how they are organized (e.g., file\_name\_pattern\_YYYYMM.tar in monthly aggregations).**

None. The data are received on floppy disks and email (body and as attachments) as retrieved from the ship with no standard file name structures.

Once received these will need to be forwarded to security for scanning before being ingested into production.

We can rename to fit CLASS ingest requirements

**17. Explain how to access sample data files and/or a file listing for previewing. If it is not available now, when will it be available?**

I have an email with reports in the body. Otherwise, I have to wait to see what comes in. Since the software is just being installed, there may be delays before more data begins to come in. Even then, this set will not be high volume.

**18. What is the total data volume to be submitted?**

**Continuous Data: data volume rate for a continuous data production.**

Total Data Volume Rate: 1MB per Month

Data File Frequency: 1 per Month

Data Production Start: 2013-01-25

**19. Are later updates, revisions or replacement files anticipated? If so, explain the conditions for submitting these additional data to the archive.**

No additional updates, revisions or replacement data are anticipated.

**20. Describe the server that will connect to the ingest server at NCEI for submitting the data.**

Physical Location: Global

System Name: N/A

System Owner: N/A

Additional Information: These will come directly from ship operators, from Port Meteorological Officers, or from US VOS Management

**21. What are the possible methods for submitting the data to NCEI? Select all that apply.**

1. Physical Media Delivery

Email

**22. Identify how you would like NCEI to distribute the data. Web access support depends on the resources available for the dataset.**

1. User interface to order and stage data for download

2. Direct download links

**23. Will there be any distribution, usage, or other restrictions that apply to the data in the archive?**

No known constraints apply to the data.

**24. Discuss the rationale for archiving the dataset and the anticipated benefits. Mention any risks associated with not archiving the dataset at NCEI.**

Currently there is no archive for US VOS delayed mode data except at NCDC. Previously, we processed paper forms through CDMP and delayed mode data in an erroneous and proprietary ascii SEAS format. SEAS is in the process of being corrected to fix known bugs and upgraded to produce IMMT-4, and CDMP keyed data has since ceased. In order to prevent gaps in the archives during this transition, Turbowin 5.0 is being installed on some US VOS ships. From those ships we will receive reports in delayed mode to support ICOADS and SST products at NCDC. Delayed mode reports are important in that they can verify real-time transmissions and they can prevent loss of garbled or missing real-time reports.

**25. Are the data archived at another facility or are there plans to do so? Please explain.**

No

**26. Is there an existing agreement or requirement driving this request to archive? Have you already contacted someone at NCEI?**

We have obligations as a Contributing Member (CM) under the Marine Climatological Summaries Scheme (MCSS) of WMO to provide US VOS observations quarterly in delayed mode to the Global Collecting Centres (UK and Germany).

**27. Do you have a data management plan for your data?**

No

**28. Have funds been allocated to archive the data at NCEI?**

NCDC receives funding from NOAA/CPO to support ICOADS/VOSCLim source data processing.

**29. Identify the affiliated research project, its sponsor, and any project/grant ID as applicable.**

N/A

**30. Is there a desired deadline for NCEI to archive and provide access to the data?**

Archive by: 2016-12-31

Accessible by:

**31. Add any other pertinent information for this request.**

None